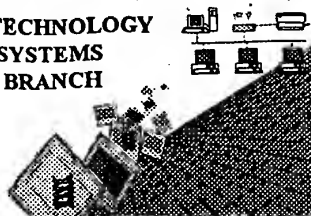


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/904,923A
Source: OIP
Date Processed by STIC: 11/13/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER:

09/904,923A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002
TIME: 13:53:10

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

4 <110> APPLICANT: Novartis AG
6 <120> TITLE OF INVENTION: Modified viral surface proteins for binding to extracellular
7 matrix components
9 <130> FILE REFERENCE: 4-30246a/GTI
11 <140> CURRENT APPLICATION NUMBER: US 09/904,923A
C--> 12 <141> CURRENT FILING DATE: 2002-10-02
15 <160> NUMBER OF SEQ ID NOS: 3
17 <170> SOFTWARE: Patentln version 3.1

ERRORED SEQUENCES

W--> 18 <210> SEQ ID NO: 1
19 <211> LENGTH: 229
20 <212> TYPE: PRT
21 <213> ORGANISM: Moloney murine leukemia virus
23 <400> SEQUENCE: 1
25 Ala Ser Pro Gly Ser Ser Pro His Gln Val Tyr Asn Ile Thr Trp Glu
26 1 5 10 15
29 Val Thr Asn Gly Asp Arg Glu Thr Val Trp Ala Thr Ser Gly Asn His
E--> 30 20 25 30 ← insert number
33 Pro Leu Trp Thr Trp Trp Pro Asp Leu Thr Pro Asp Leu Cys Met Leu
E--> 34 35 40 45 ←
37 Ala His His Gly Pro Ser Tyr Trp Gly Leu Gly Tyr Gln Ser Pro Phe
38 50 55 60
41 Ser Ser Pro Pro Gly Pro Pro Cys Cys Ser Gly Gly Ser Ser Pro Gly
E--> 42 65 70 75 80 ←
46 Cys Ser Arg Asp Cys Glu Glu Pro Leu Thr Ser Leu Thr Pro Arg Cys
47 85 90 95
50 Asn Thr Ala Trp Asn Arg Leu Lys Leu Asp Gln Thr Thr His Lys Ser
51 100 105 110
54 Asn Glu Gly Phe Tyr Val Cys Pro Gly Pro His Arg Pro Arg Glu Ser
55 115 120 125
57 Lys Ser Cys Gly Gly Pro Asp Ser Phe Tyr Cys Ala Tyr Trp Gly Cys
58 130 135 140
60 Glu Thr Thr Gly Arg Ala Tyr Trp Lys Pro Ser Ser Ser Trp Asp Phe
61 145 150 155 160
63 Ile Thr Val Asn Asn Asn Leu Thr Ser Asp Gln Ala Val Gln Val Cys
64 165 170 175
66 Lys Asp Asn Lys Trp Cys Asn Pro Leu Val Ile Arg Phe Thr Asp Ala
67 180 185 190
69 Gly Arg Arg Val Thr Ser Trp Thr Thr Gly His Tyr Trp Gly Leu Arg
70 195 200 205

Does Not Comply
Corrected Diskette Needed

pg 1-2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002
TIME: 13:53:10

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

```

72 Leu Tyr Val Ser Gly Gln Asp Pro Gly leu Thr Phe Gly Ile Arg Leu
73      210                      215                      220
75 Arg Tyr Gln Asn Leu
76 225
79 <210> SEQ ID NO: 2
80 <211> LENGTH: 687
81 <212> TYPE: DNA
84 <213> ORGANISM: Moloney murine leukemia virus
87 <400> SEQUENCE: 2
E--> 88 gcttgcgccg gctccagtc tcatcaagtc tataatatca cctgggaggt aaccaatgga
89      60
E--> 91 gatcgggaga cggtatgggc aacttctggc aaccacctc tgtggacctg gtggcctgac
92      120
E--> 94 cttacccag atttatgtat gttagccac catggaccat cttattggg gctagaatat
95      180
E--> 97 caatccctt tttctctcc cccggggccc ccttggtgct cagggggcag cagcccaggc
98      240
E--> 100 tgttcagag actgcgaaga acctttaacc tcctcacc ctcggtgcaa cactgcctgg
101      300
E--> 103 aacagactca agctagacca gacaactcat aaatcaaatg agggatttta tgtttgcccc
104      360
E--> 106 gggccccacc gccccgaga atccaagtca tgtgggggct bagactcctt ctactgtgcc
107      420
E--> 109 tattggggct gtgagacaac cggtagagct tactggaagc cctctcatc atgggatttc
110      480
E--> 113 atcacagtaa acaacaatct cacctctgac caggctgtcc aggtatgcaa agataataag
114      540
E--> 116 tggtgcaacc ccttagttat tcggtttaca gacgccggga gacgggttac ttctgggacc
117      600
E--> 119 acaggacatt actggggcct acgtttgtat gtctccggac aagatccagg gcttacattt
120      660
E--> 123 gggatccgac tcagatacca aaatcta
124      687
127 <210> SEQ ID NO: 3
128 <211> LENGTH: 10
129 <212> TYPE: PRT
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: collagen-binding domain of von Willebrand Factor
137 <220> FEATURE:
138 <221> NAME/KEY: BINDING
139 <222> LOCATION: (1) (10)
140 <223> OTHER INFORMATION:
OK-> 143 <400> 3
145 Trp Arg Glu Pro Ser Phe Met Ala Leu Ser
146 1                      5                      10
176 #153407v1
E--> 177 4-30246A DG.ST25.txt
E--> 179 Page 3

```

format
error
(see item 1
on Error
Summary Sheet)

delete

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002

TIME: 13:53:11

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:283 W: Missing Blank Line separator, <210> field identifier
L:30 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1
M:332 Repeated in SeqNo=1
L:88 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:2
M:254 Repeated in SeqNo=2
L:143 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:140
L:177 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:177 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:179 M:252 E: No. of Seq. differs, <211> LENGTH:Input:10 Found:11 SEQ:3